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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,413	04/25/2001	Tony M. Pearce	5066 P	9340

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EXAMINER

HO, THOMAS Y

ART UNIT	PAPER NUMBER
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3677

DATE MAILED: 01/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/843,413

Applicant(s)

PEARCE, TONY M.

Examiner

Thomas Y Ho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-3 rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

As to claim 1, the specification and drawings fail to disclose any embodiment having both a padding layer and an overlaid padding material. All embodiments described by Applicant only show a single layer of material outside of the resilient material. It is unclear as to what structures the claim is directed towards. Claims 2-3 depend from claim 1.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 4, and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Greenawalt US4528705 in view of Pearce US5749111, and further in view of cited case law.

As to claim 1, Greenawalt705 discloses, a contourable orthopedic pillow comprising: an inflatable bladder 34, said inflatable bladder being capable of being inflated to a variety of levels



by placing gas therein, a resilient material 12 ring both the top and bottom of said bladder, said resilient material being sufficiently flexible to accommodate inflation of said bladder, wherein said combination of bladder and covering is symmetrical (see Figures 2 and 4) top to bottom so that it can be turned over for use on either side, wherein the pillow may be adjusted from a fully flat configuration (see Figure 5) to a fully contoured configuration (see Figure 4) by inflating said bladder, wherein said bladder may be inflated in discrete increments by use of a pump 38, wherein said resilient material is overlaid with another padding material 40. The difference between the claim and Greenawalt705 is the claim recites, the padding material selected from the group consisting of polyurethane foam, memory foam, latex foam rubber, fiber batting, buckling elastomers, and a resilient material consisting of discontinuous pieces of flexible material joined together by low durometer, high elongation elastomeric material, and a padding layer covering at least a portion of said resilient material including a yieldable cushioning element having a flexible resilient gel cushioning media having shape memory and being substantially solid and non-flowable at temperatures below 130 degrees Fahrenheit, wherein the cushioning element includes a quantity of gel cushioning media formed to have a top a bottom and an outer periphery, said cushioning media being compressible so that it will deform under the compressive force of a cushioned object, a plurality of hollow columns formed in said cushioning media, each of said columns having a longitudinal axis along its length, each of said columns having a column wall which defines a column interior, and each of said columns having two ends, each of said column ends being positioned at two different points of said column axis, at least one of said columns being positioned generally parallel to the direction of a compressive force exerted on the cushioning element by a cushioned object at least one of said column walls

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being capable of buckling beneath a protuberance. Pearce111 discloses a cushion similar to that of Greenawalt705. In addition, Pearce111 further teaches putting a cushioning element 206 on a base layer 301, wherein the padding material is selected from the group consisting of polyurethane foam, memory foam, latex foam rubber, fiber batting, buckling elastomers, and a resilient material consisting of discontinuous pieces of flexible material joined together by low durometer, high elongation elastomeric material (col.16, ln.45-60), and a padding layer 206 (assumed to be the same as the padding material layer already recited) covering at least a portion of a base including a yieldable cushioning element having a flexible resilient gel cushioning media having shape memory and being substantially solid and non-flowable at temperatures below 130 degrees Fahrenheit (col.6, ln.5-20), wherein the cushioning element includes a quantity of gel cushioning media formed to have a top a bottom and an outer periphery, said cushioning media being compressible so that it will deform under the compressive force of a cushioned object, a plurality of hollow columns 206 (col.16, ln.45-60) formed in said cushioning media, each of said columns having a longitudinal axis along its length, each of said columns having a column wall which defines a column interior, and each of said columns having two ends, each of said column ends being positioned at two different points of said column axis, at least one of said columns being positioned generally parallel to the direction of a compressive force exerted on the cushioning element by a cushioned object at least one of said column walls being capable of buckling beneath a protuberance (see Figures 2-3). It would have been obvious to one of ordinary skill in the art, having the disclosures of Greenawalt705 and Pearce111 before him at the time the invention was made, to modify the padding layer of Greenawalt 705 to be made of the material of the padding in Pearce111, to obtain a padding layer on a base layer that

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is made from buckling elastomeric columns and walls. One would have been motivated to make such a combination because the ability to avoid pressure peaks, and negate any ill effects from puncturing would have been achieved, as taught by Pearce111 (col.5, ln.15-25; col.6, ln.5-20). In addition, the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

As to claim 4, Greenawalt705 discloses, a contourable orthopedic pillow comprising: an inflatable bladder 34, a resilient material 12 covering both the top and bottom of said bladder, said resilient material being sufficiently flexible to accommodate inflation of said bladder, wherein said resilient material has top/bottom symmetry so that the pillow can be turned over for use on either side, wherein said bladder may be inflated and deflated to adjust contour of the pillow from nearly flat to fully contoured, wherein contour of the pillow is adjustable in discrete increments by inflating said bladder in discrete increments, and a padding layer 40 covering at least a portion of said resilient material. Pearce111 teaches a padding layer covering 205 on a base 301, the covering including a yieldable cushioning element 205 having a flexible resilient gel cushioning media having shape memory and being substantially solid and non-flowable at temperatures below 130 degrees Fahrenheit (col.6, ln.5-20), wherein the cushioning element includes a quantity of gel cushioning media formed to have a top a bottom and an outer periphery, said cushioning media being compressible so that it will deform under the compressive force of a cushioned object, a plurality of hollow columns 206 formed in said cushioning media, each of said columns having a longitudinal axis along its length each of said columns having a column wall which defines a column interior, and each of said columns having



two ends, each of said column ends being positioned at two different points of said column axis, at least one of said columns being positioned generally parallel to the direction of a compressive force exerted on the cushioning element by a cushioned object, at least one of said column walls being capable of buckling beneath a protuberance (see Figures 2-3).

As to claim 7, Greenawalt705 discloses, a contourable orthopedic pillow comprising: a bladder 34 that may be inflated by placement of a gas therein, and a resilient material 12 overlaying both the top and bottom of said bladder, said resilient material covering being sufficiently flexible to accommodate inflation of said bladder, wherein contour of the pillow is adjustable from nearly flat to fully contoured by inflation of said bladder, wherein contour of the pillow is adjustable in discrete increments, and a padding layer 40 covering at least a portion of said resilient material. Pearce111 teaches, a padding layer covering including a yieldable cushioning element 205 having a flexible, resilient, gel cushioning media having shape memory and being substantially solid and non-flowable at temperatures below 130 degrees Fahrenheit (col.6, ln.5-20), wherein the cushioning element includes a quantity of gel cushioning media formed to have a top, a bottom, and an outer periphery, said cushioning media being compressible so that it will deform under the compressive force of a cushioned object, a plurality of hollow columns 206 formed in said cushioning media, each of said columns having a longitudinal axis along its length, each of said columns having a column wall which defines a column interior, and each of said columns having two ends, each of said column ends being positioned at two different points of said column axis, at least one of said columns being positioned generally parallel to the direction of a compressive force exerted on the cushioning element by a cushioned object, at least one of said column walls being capable of buckling

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beneath a protuberance (see Figures 2-3).

Claims 2, 5, and 8 are rejected under 35 USC 103(a) as being obvious over Greenawalt US4528705 in view of Pearce US5749111, and further in view of cited case law, and further in view of Greenawalt US4501034.

As to claim 2, the difference between the claim and Greenawalt705 is the claim recites, further comprising a second inflatable bladder. Greenawalt034 discloses an inflatable pillow similar to that of Greenawalt705. In addition, Greenawalt034 further teaches a first inflatable bladder 24 and a second inflatable bladder 32. It would have been obvious to one of ordinary skill in the art, having the disclosures of Greenawalt705 and Greenawalt034 before him at the time the invention was made, to modify the inflatable pillow of Greenawalt705 to have a second inflatable bladder of Greenawalt304, to obtain an inflatable pillow having first and second inflatable bladders. One would have been motivated to make such a combination because the ability to increase the possibilities of firmness variation would have been achieved, as taught by Greenawalt034 (col.2, ln.50-60).

As to claim 5, Greenawalt034 teaches, further comprising a second inflatable bladder 32 which may be inflated to further adjust orthopedic contour of the pillow.

As to claim 8, Greenawalt034 teaches, further comprising a second inflatable bladder 32 which may be inflated to further adjust orthopedic contour of the pillow.

Claims 3, 6, and 9 are rejected under 35 USC 103(a) as being obvious over Greenawalt US4528705 in view of Pearce US5749111, and further in view of cited case law, and further in view of Pekar US5372487.

As to claim 3, Greenawalt705 discloses, further comprising: a pump 38 integral to the

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pillow (see Figure 1), the pump including a pump bladder having bladder walls, an orifice 36 on a bladder wall through which a gas may travel as desired, resilient means located in said pump bladder, said resilient means serving to re-expand said pump bladder after it has been contracted by a squeezing force, and a one-way valve between said pump bladder and said inflatable gas-containing bladder to permit the pump to force gas into said inflatable gas-containing bladder 34, and a bleed valve on said inflatable gas-containing bladder for permitting gas to escape therefrom (col.2, ln.40-55). Greenawalt705 discloses a bulb type pump used for checking blood pressure. Although the exact details are not disclosed, it is old and well known that pumps having the structures and use disclosed do in fact possess the claimed elements. In addition, another old and well-known pump for an inflatable cushion is disclosed by Pekar487, and is used as further evidence to show that inflatable cushions have pumps as claimed. It would have been obvious to one of ordinary skill in the art, having the disclosures of Greenawalt705 and Pekar487 before him at the time the invention was made, to include in the pump of Greenawalt705, the elements of the pump in Pekar487, to form a means to selectively inflate and deflate the cushion that is integral to the bladder (col.3, ln.35-40).

As to claim 6, Greenawalt705 discloses, further comprising: a pump 38 integral to the pillow (see Figure 1), the pump including a pump bladder having bladder walls, an orifice on a bladder wall through which a gas may travel as desired, resilient means located in said pump bladder, said resilient means serving to re-expand said pump bladder after it has been contracted by a squeezing force, and a one-way valve between said pump bladder and said inflatable gas-containing bladder to permit the pump to force gas into said inflatable gas-containing bladder, and a bleed valve on said inflatable gas-containing bladder for permitting gas to escape

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therefrom. Pekar487 also teaches the claimed pump elements.

As to claim 9, Greenawalt705 discloses, further comprising a pump 38 integral to the pillow (see Figure 1), the pump including a pump bladder having bladder walls, an orifice on a bladder wall through which a gas may travel as desired, resilient means located in said pump bladder, said resilient means serving to re-expand said pump bladder after it has been contracted by a squeezing force, and a one-way valve between said pump bladder and said inflatable gas-containing bladder to permit the pump to force gas into said inflatable gas-containing bladder, and a bleed valve on said inflatable gas-containing bladder for permitting gas to escape therefrom. Pekar487 also teaches the claimed pump elements.

Claim 10 is rejected under 35 USC 103(a) as being obvious over Greenawalt US4528705 in view of Pearce US5749111, and further in view of cited case law, and further in view of Walpin US6182312.

As to claim 10, Greenawalt705 discloses, wherein said resilient material covering 12 is made of urethane (col.2, ln.15-20). The difference between the claim and Greenawalt705 is the claim recites, the material is selected from the group consisting of polyurethane foam, memory foam, latex foam rubber, fiber batting, buckling elastomers, and a resilient material that includes discontinuous pieces of flexible material joined together by low-durometer, high elongation elastomeric material. Walpin312 discloses a cushion similar to that of Greenawalt705. In addition, Walpin312 further teaches to use the material memory foam (col.4, ln.1-10) for the resilient material covering 50. It would have been obvious to one of ordinary skill in the art, having the disclosures of Greenawalt705 and Walpin312 before him at the time the invention was made, to modify the urethane resilient material covering of Greenawalt705 to be made of

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memory foam, as in Walpin312, to obtain a resilient material covering made of memory foam.

One would have been motivated to make such a combination because the ability to conform to a user's head and neck region would have been achieved, as taught by Walpin312 (col.4, ln.1-10).

In addition, the selection of a known material based upon its suitability for the intended use is a design consideration within the skill of the art. In re Leshin, 227 F.2d 197, 125 USPQ 416 (CCPA 1960).

Claim 11 is rejected under 35 USC 103(a) as being obvious over Greenawalt US4528705 in view of Pearce US5749111, and further in view of cited case law, and further in view of Walpin US6182312, and further in view of Pekar US5372487.

As to claim 11, Greenawalt705 discloses, further comprising: a pump 38 integral to the pillow (see Figure 1), the pump including a pump bladder having bladder walls, an orifice on a bladder wall through which a gas may travel as desired, resilient means located in said pump bladder, said resilient means serving to re-expand said pump bladder after it has been contracted by a squeezing force, and a one-way valve between said pump bladder and said inflatable gas-containing bladder to permit the pump to force gas into said inflatable gas-containing bladder, and a bleed valve on said inflatable gas-containing bladder for permitting gas to escape therefrom. Pekar487 also teaches the claimed pump elements.

Response to Arguments

Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

In response to Applicant's Declaration, concerning the commercial success of the invention, the Declaration was considered but does not overcome any of the rejections now

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presented. The Examiner maintains that the prior art of record meets all requirements for an obviousness type rejection.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US5203607 to Landi discloses a bicycle seat.

US5636395 to Serda discloses a mattress pad with gel filled chambers.

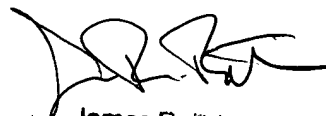
US6026527 to Pearce discloses gelatinous cushions with buckling columns.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas Y Ho whose telephone number is (703)305-4556. The examiner can normally be reached on M-F 10:00AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, J. J Swann can be reached on (703)306-4115. The fax phone number for the organization where this application or proceeding is assigned is (703)872-9326.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-1113.

TYH


James R. Brittain
Primary Examiner